

# Major Investment Study I-70

JACKSON COUNTY



## The Challenge:

Jackson County, Missouri: As any traveler on I-70 understands, this important transportation link needs help. In parts of Jackson County, the highway is well past its planned lifetime and needs to be reconstructed. Additionally, through much of the county, I-70 carries significantly more traffic than it was designed to carry. MoDOT has initiated the I-70 Major Investment Study (MIS) to identify ways to make travel in the area safer and easier.

The MIS is important for several reasons. It is an important opportunity for the region to examine the options and develop a consensus about the kind of transportation system that will best serve the area in the years to come. The MIS will also help ensure that any construction or other improvements are the best possible solution, and that investments address long-term needs wherever possible. The MIS process also lays the groundwork for federal funding, which almost always plays an important role in major transportation projects.

### Specific I-70 MIS project goals include:

- **Safety** - reduce accidents on the highway and at ramps.
- **Accessibility** - improve access onto and across I-70 in a way that supports local land-use plans.
- **Efficiency** - restore and maintain what is already there, create cost-effective improvement strategies,

and minimize construction impacts.

- **Choice** - support alternatives to individual car travel.
- **Mobility** - ensure that the I-70 Study Corridor runs as smoothly as possible, and reduce the impact of bottlenecks.
- **Environment** - address air quality and other environmental measures, and impact as little occupied or sensitive property as possible.

### Challenges and Opportunities

The MIS has identified the following challenges to improving I-70 in Jackson County.

- **Peak-Period Congestion** - Rush hour traffic can, in some areas, run slower than 20 MPH below posted speed limits. Over time, traffic on I-70 is expected to increase, adding to the problem.
- **Bridge and Pavement Conditions** - The pavement and bridges are deteriorating and in need of significant maintenance, rehabilitation and in some cases, replacement.
- **Accident History** - There is an increasing trend toward serious accidents over the past 10 years.
- **Ramp Congestion and Delay** - Because of heavy traffic and limited capacity, traffic on some ramps backs up onto the interstate, especially during rush hour.
- **Highway Deficiencies** - I-70 is over 40 years old. It was not designed to carry the volume of traffic that it



I-70 Major Investment Study project news from the Missouri Department of Transportation

Spring 2003

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carries today. Additionally:

- Curves at Benton Boulevard and Jackson Avenue are tight and narrow
- There are several different ramp configurations
- Some ramps are too short, or too close together
- Poor sight distances for signs and lighting
- Shoulders are too narrow
- Transit - The same congestion that affects cars also affects buses, which diminishes some of the advantages of transit. The lack of transit centers also limits the use of express bus service, bus rapid transit, ride sharing and other mass transit.

- **Increased Maintenance and Operating Costs** - Maintaining an aging highway system is increasingly expensive. MoDOT is responsible for the nation's seventh-largest highway system, but is ranked 46th in the nation in terms of the dollars available per mile for maintenance.
- **Potential Economic Losses** - Poor road conditions can negatively affect local businesses as well as regional and state economies.

## Oh the Possibilities!

Community leaders, transportation experts and members of the community have been working together to define the kinds of solutions that might help improve travel within the I-70 corridor. A wide range of possibilities - from improved "Park and Ride" facilities, to additional lanes, to new routes between the Benton Curve and downtown - have been drafted.

The next steps are to decide which of those ideas makes the most sense, in terms of improving I-70, the safety of travelers, economics, the environment, as well as the vision of the communities that line the Interstate and the values of the people who travel in the corridor every day.



### What's planned to happen ...

In most transportation studies, different solutions are compared to a "no build" option. Because a range of improvements are already planned on I-70, the base conditions, or "no build" includes the following:

#### *Take care of what we have*

- Repave I-70 and build low cost repairs
- Support existing transit service

#### *Improve critical areas*

- Upgrade I-70 interchanges as identified on MoDOT Bridge List
- Upgrade I-70/I-435 interchange as planned in the I-435 MIS
- Upgrade Loop's north east corner (Paseo) and accommodate transit over the Missouri River as planned in the Northland-Downtown MIS

### What could happen ...

Beyond the planned activities, there is a huge range of possible upgrades, improvements and changes. The best practices and ideas of communities around the globe have been considered and the following options have the potential to improve I-70 in Jackson County:

#### *Additional lanes:*

- for regular traffic and/or
- reserved for car-pools and buses

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- Managed lanes could be built on existing or new pavement, and would be separated from regular traffic by either permanent or moveable barriers. Traffic in those lanes would travel toward downtown during the morning rush hour and away from downtown in the afternoon. These special lanes could also help deal with congestion related to special events along I-70. Managed lanes could also include tolls.



- Downtown Loop
- Grain Valley
- Oak Grove
- I-470
- Route 40

- "Operation Green Light" which will synchronize traffic signals throughout the area
- Truman Road
- 22nd/23rd Street

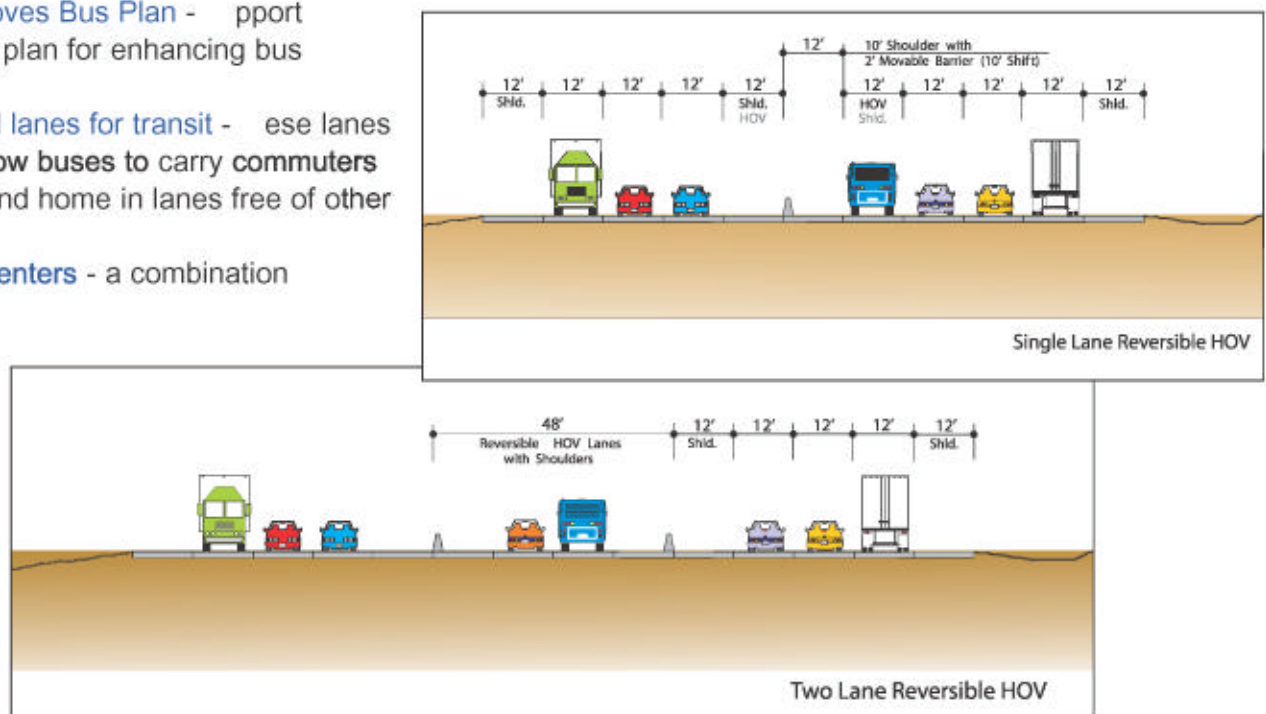


- **Smart Moves Bus Plan** - support KCATA's plan for enhancing bus service
- **Reserved lanes for transit** - these lanes would **allow buses to carry commuters** to work and home in lanes free of other traffic
- **Transit Centers** - a combination parking,

- **Bus Rapid Transit** - Make improvements on major corridors to allow buses to travel more quickly
- **Commuter Rail** - Use existing rail lines to carry commuters to and from work

- Expand freeway service patrols
- Incident Management/Traveler Information - p  
clear accidents quickly and provide information about congestion, construction, etc.
- Operational Improvements - redesign lanes to reduce sudden lane changes, lengthen merge and exit lanes
- Straighten Benton & Jackson curves

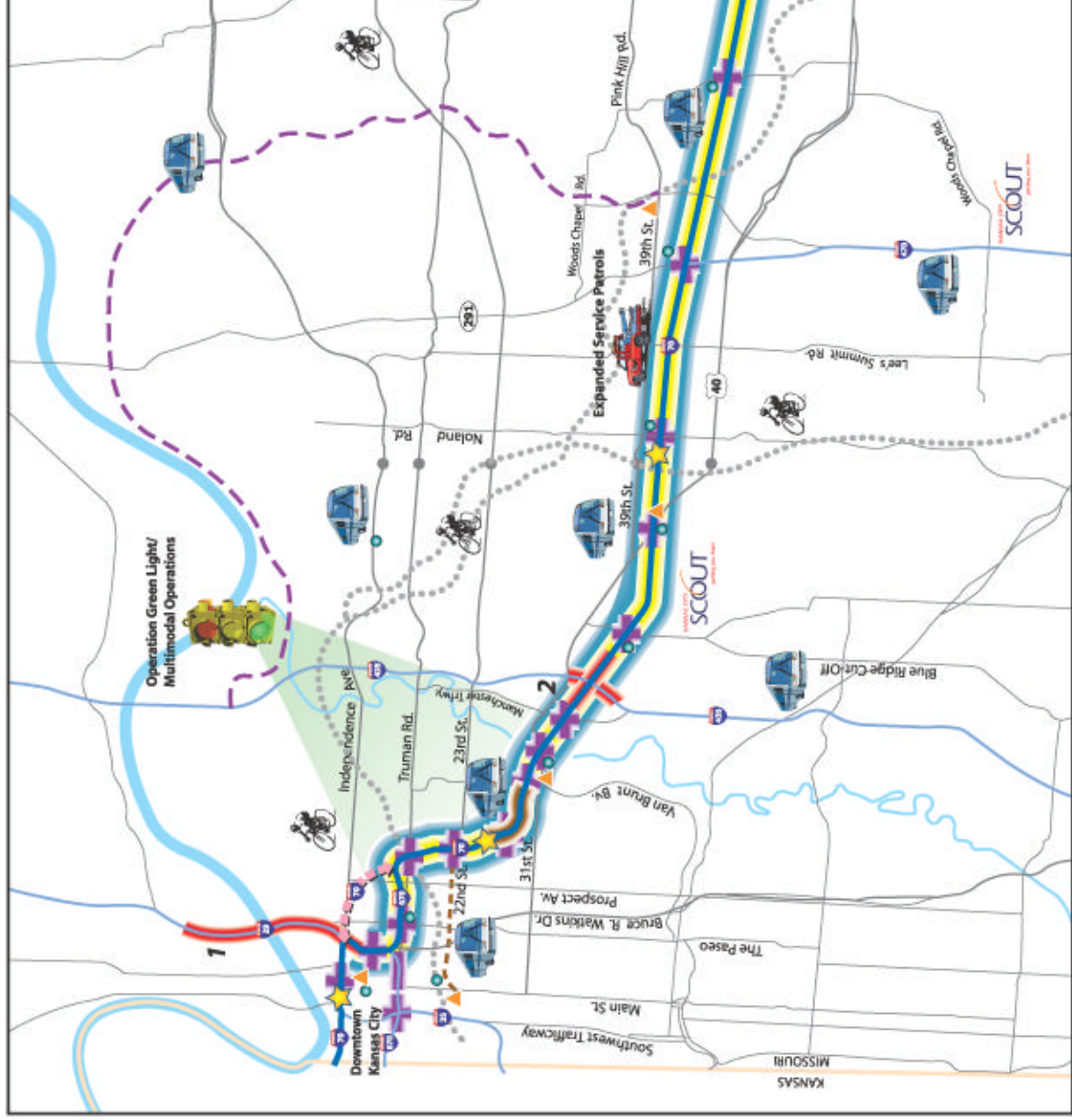
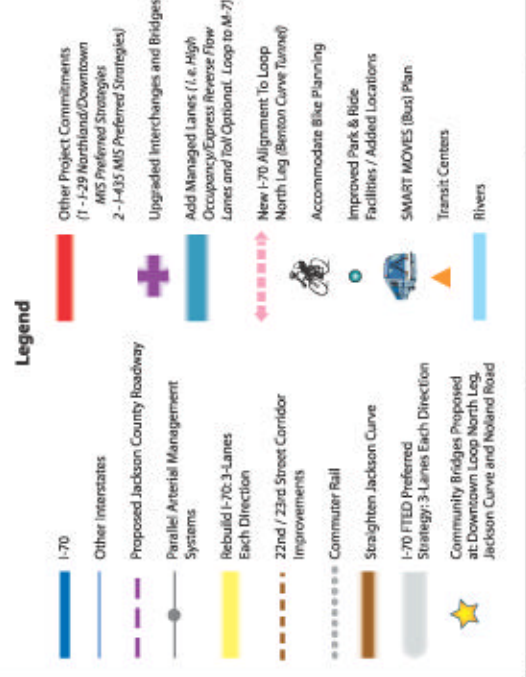
- **Community Bridges** - Bridges designed to help re-connect neighborhoods over 50 years old that were divided by construction of I-70
- **Congestion Pricing** - Fees charged to encourage non-rush hour travel
- **New Alignments** - A new highway location - to help straighten the Benton Curve.





## I-70 Major Investment Study Jackson County

Strategy 2-C: Strategy 2-B PLUS I-70 New Alignment, Unique Features and Bus Rapid Transit

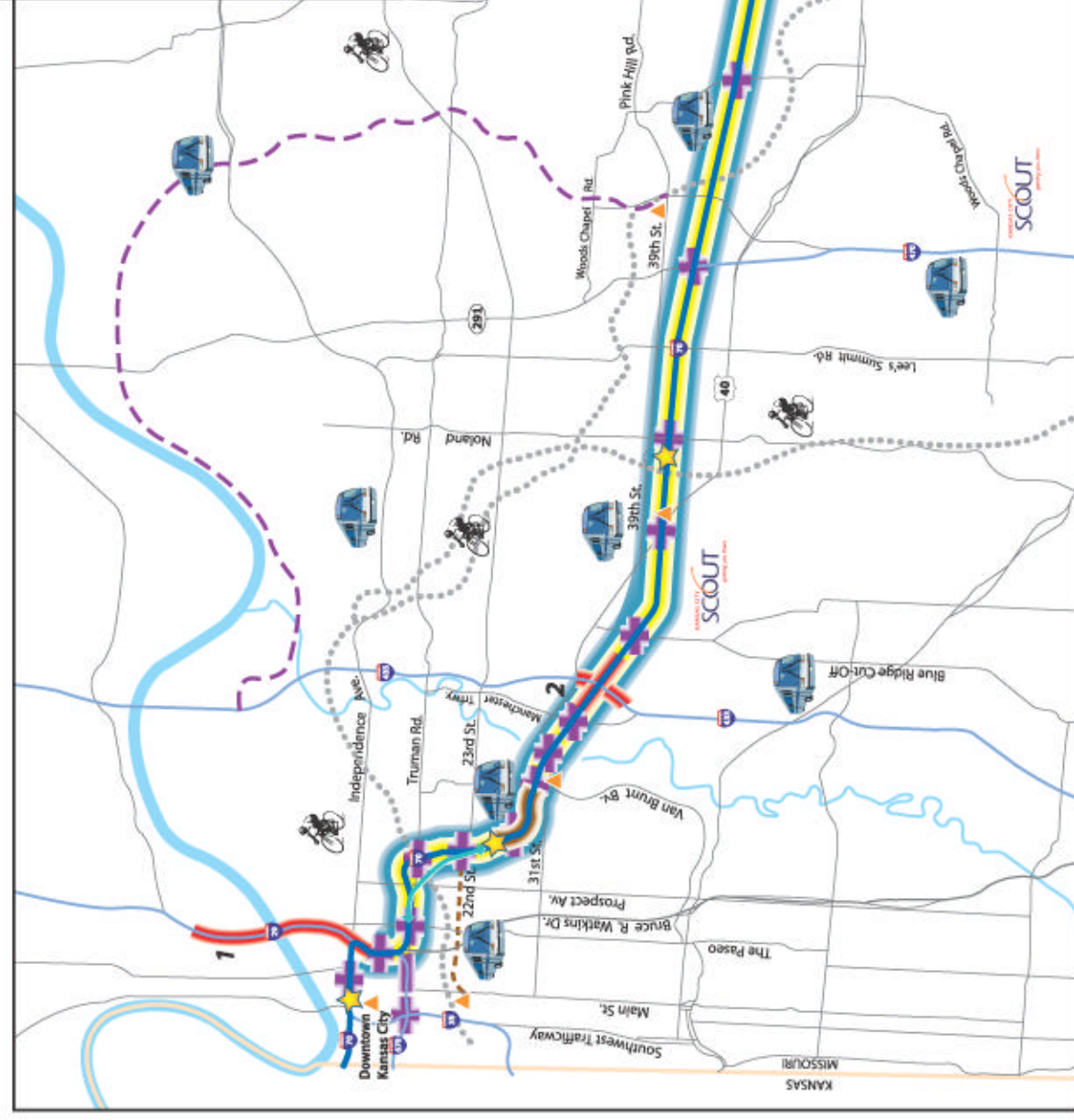
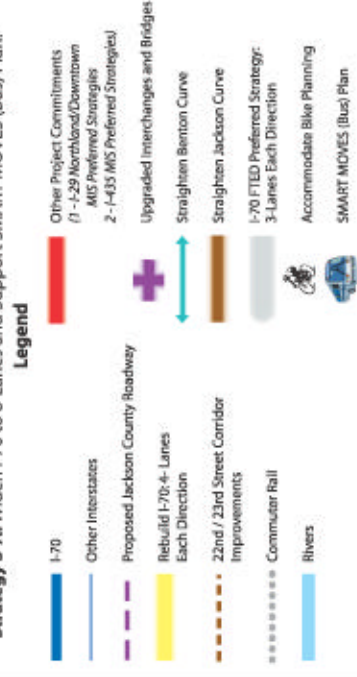


### Package 2-C.

This map illustrates Packages 2-A, 2-B and 2-C: Rebuilding I-70 as 6 lanes; increasing commuter express service; reversible lanes for high-occupancy vehicles (HOV) and transit; Smart Moves Bus Plan; new alignment (tunnel) and bus rapid transit. To see all six packages, go to [www.i70mis.org](http://www.i70mis.org)

## I-70 Major Investment Study Jackson County

Strategy 3-A: Widen I-70 to 8-Lanes and Support SMART MOVES (Bus) Plan.



### Package 3-A.

This map illustrates Packages 3-A and 3-B: Widening I-70 to 8 lanes; Smart Moves Bus Plan; high-occupancy vehicles (HOV) and transit and bus rapid transit. To see all six packages, go to [www.i70mis.org](http://www.i70mis.org).



# Bringing Ideas Together

Clearly, many of these options would work well together, and the study team has grouped those options in "Packages."

- Package 1 includes previously planned improvements and construction.

**Package 1 - Repair I-70 and construct planned improvements.** This includes repaving I-70 and improving interchanges and bridges already identified by MoDOT, as well as the improvements to the I-70/I-435 interchange identified in the I-435 MIS and the new transit bridge and northland connections identified in the Northland-Downtown MIS. Even with these improvements, travel projections show that by 2025, I-70 will again be congested during rush hours. Estimated cost: \$324 - 378 million.

- Package 2 strategies focus on moving more people.

**Package 2-A - Rebuild I-70 and better support public transportation.** Along with the improvements in Package 1, I-70 would be constructed and/or widened to six lanes from Downtown to Oak Grove. It would utilize both KC Scout and Operation Green Light to improve travel on parallel roads. The package also includes improvements to existing Park and Ride Facilities. These options would help support increase rush-hour commuter express bus service. Estimated cost: \$878 - 932 million.

**Package 2-B - Add multi-modal options and support Smart Moves.** Along with the improvements in Package 2-A, two lanes would be dedicated to rush hour traffic. Those lanes could be used for traditional traffic, or reserved for High Occupancy Vehicles (HOV) or transit. A toll could be associated with use of these lanes. Major interchanges would be rebuilt, and the Jackson and Benton curves would be straightened as much as possible within the existing right of way. Transit would be supported through the construction of transit centers. Downtown, there would be a new Truman Road interchange, improvements to the I-670 and I-35 interchange, and access along the east and north edges of the loop would be reconstructed. Estimated Cost: \$1,204 - 1,258 million.

**Package 2-C - Add new alignment and unique features.** This package includes Package 1, 2-A and 2-B and also includes ideas for long-term improvements to I-70, including the possibility of a tunnel from the Benton curve to the north side of the downtown loop. Other ideas include Community Bridges, which would reconnect older neighborhoods previously divided by I-70, and the initiation of Bus Rapid Transit and Commuter Rail service. Estimated Cost: \$1,528 - 1,581 million.

- Package 3 strategies focus on moving more vehicles.

**Package 3-A - Widen I-70 and support Smart Moves.** Under this package, along with Package 1 improvements, I-70 would be widened to eight lanes between downtown and Blue Springs. Interchanges would be fully reconstructed, and the Jackson curve would be straightened. The Benton curve would be redesigned to enhance safety and access to 22nd/23rd Street. Access to downtown would be upgraded along I-70 and I-670. This package would support increased commuter bus service. Estimated Cost: \$1,048 - 1,102 million.

**Package 3-B - Stripe HOV lanes and add unique features.** This package includes all of Package 1 and 3-A. It would also create HOV lanes for carpools and/or mass transit, and includes the possibility of tolls. This package also includes the possibility of Community Bridges, the construction of transit centers, Commuter Rail and Bus Rapid Transit, as well as supporting the Smart Moves Bus Plan. Estimated Cost: \$1,307 - 1,361 million.



## What's Next?

By its very nature, a Major Investment Study is a long-term plan. Significant public investments require careful scrutiny and responsible decision-making. Representatives from communities, MoDOT, KCATA and Mid America Regional Council, with input we receive from the public, will weigh the pros and cons of each strategy. By mid 2003, the team plans to name the strategy, or combination of strategies, that makes the most sense in terms of both benefits and costs. Once the **Preferred Strategy Report** is complete, the stage is set to begin project development, including the identification of appropriate funding.

Issues that will be considered when naming the Preferred Strategy include:

- Public Input
- Conceptual Strategy Cost
- Ecological Impacts
- Economic Impacts
- Safety
- Social & Community Impacts
- Travel Time Savings



## What makes sense to you?

In any transportation decision, there are trade-offs. Cost is certainly an important consideration, as is how the decision will affect neighborhoods and communities, as well as the natural environment. Let us know what you think. You can tell us which package makes sense to you, and why, or which specific idea seems brightest (or dimmest!).

**Attend:** Public Input Session on  
April 8  
Blue Ridge Mall  
Use 43rd Street entrances

4:30 to 8:00 p.m. - Open House  
5:00, 6:00 & 7:00 p.m. - Identical Presentations  
Your input will help decide the future of transportation in Jackson County!

**Log onto:** [www.I70MIS.org](http://www.I70MIS.org)

**Call:** 1-888-Ask-MoDOT (toll free)

**Write:** I-70 MIS  
MoDOT Public Affairs  
600 NE Colbern Road  
Lee's Summit, MO 64086



**Join Us!**

**I-70 MIS - Conceptual Strategies Public Input Session**  
**Tuesday, April, 8, 2003**

**Blue Ridge Mall**

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**Get More Information - Give Your Input!**

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